



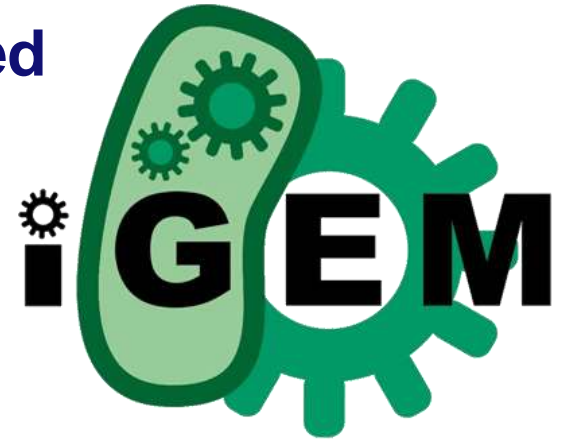
TU/e

Technische Universiteit
Eindhoven
University of Technology

Where innovation starts

iGEM

- International Genetically Engineered Machine competition



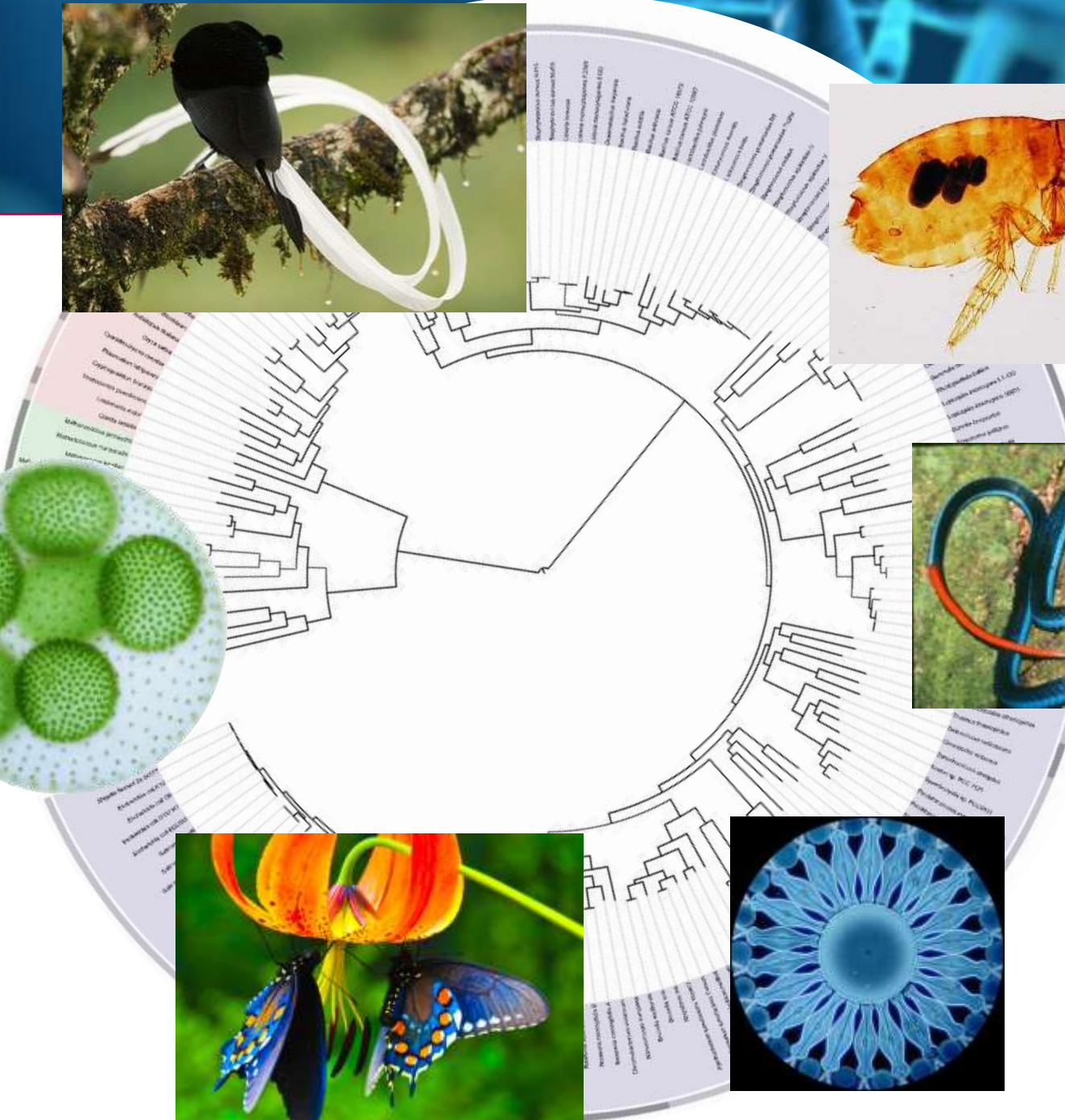
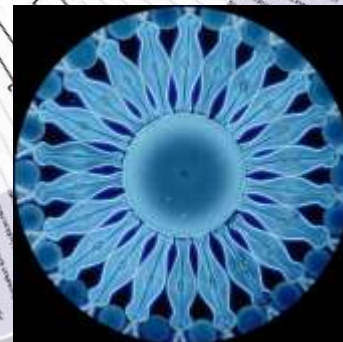
- Competitie voor studenten in Synthetische Biologie

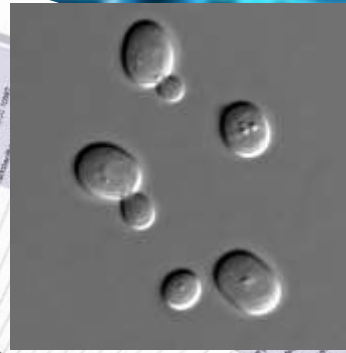








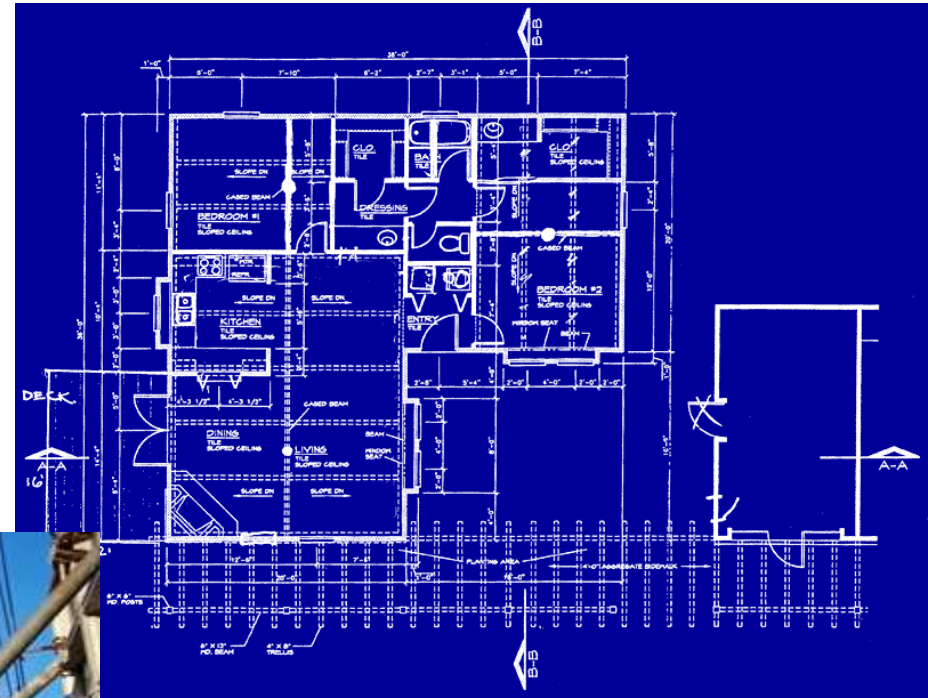


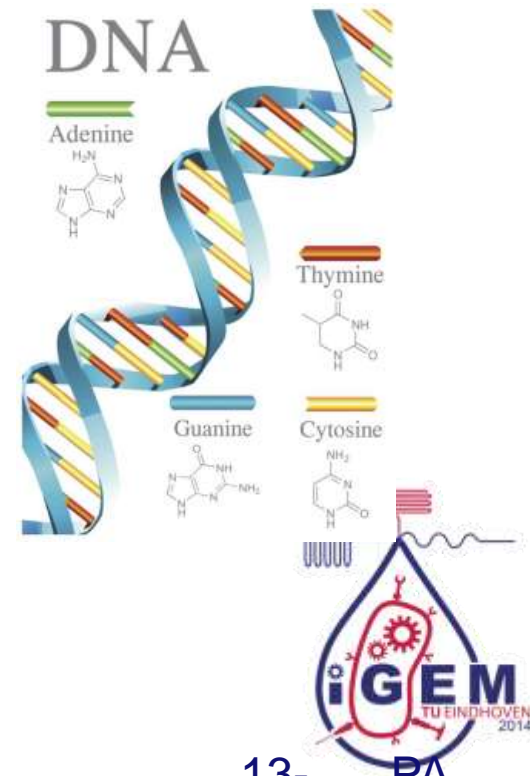
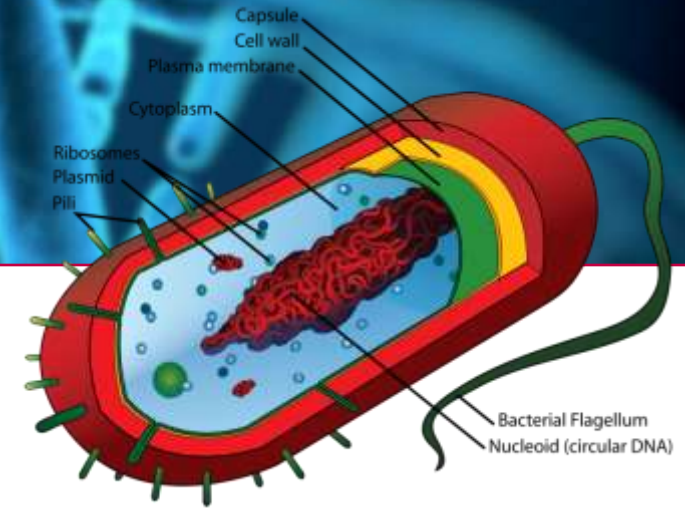
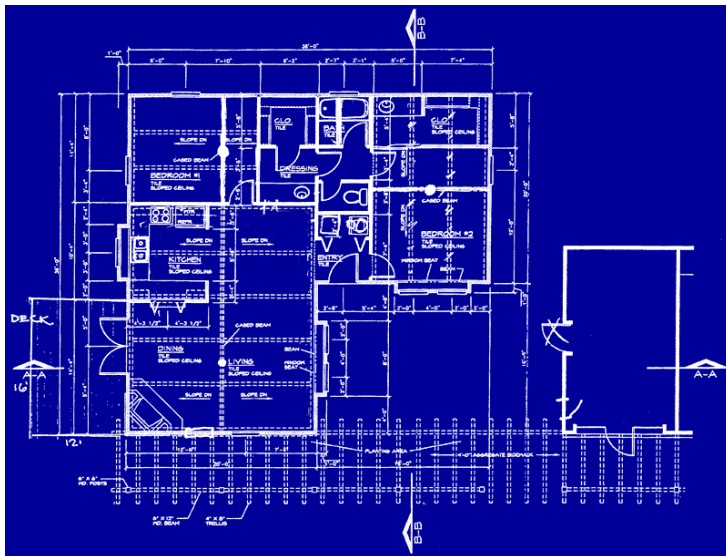


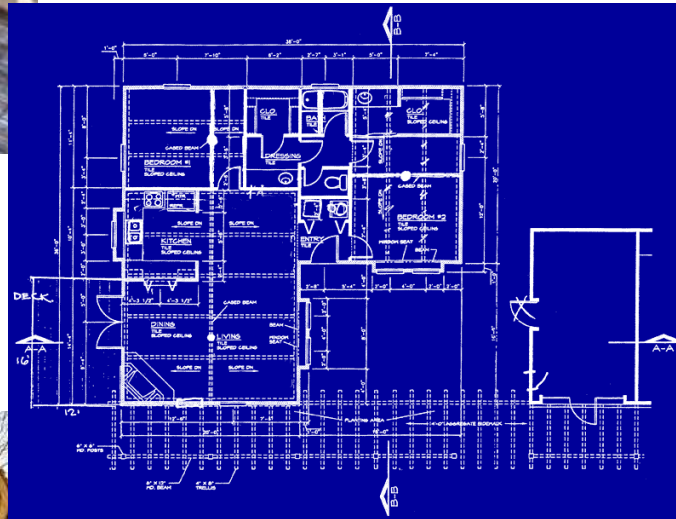
Synthetische biologie

Hoe gaat het in zijn werk?

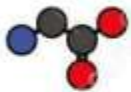








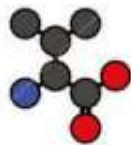




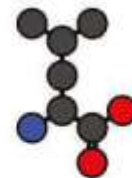
glycine (Gly, G)



L-alanine (Ala, A)



L-valine (Val, V)



L-leucine (Leu, L)



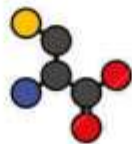
L-isoleucine (Ile, I)



L-serine (Ser, S)



L-threonine (Thr, T)



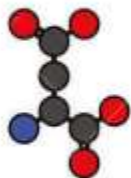
L-cysteine (Cys, C)



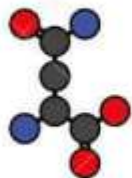
L-methionine (Met, M)



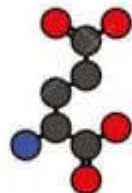
L-proline (Pro, P)



L-aspartic acid (Asp, D)



L-asparagine (Asn, N)



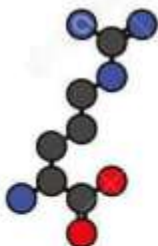
L-glutamic acid (Glu, E)



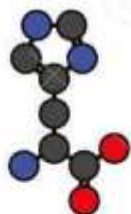
L-glutamine (Gln, Q)



L-lysine (Lys, K)



L-arginine (Arg, R)



L-histidine (His, H)



L-phenylalanine (Phe, F)

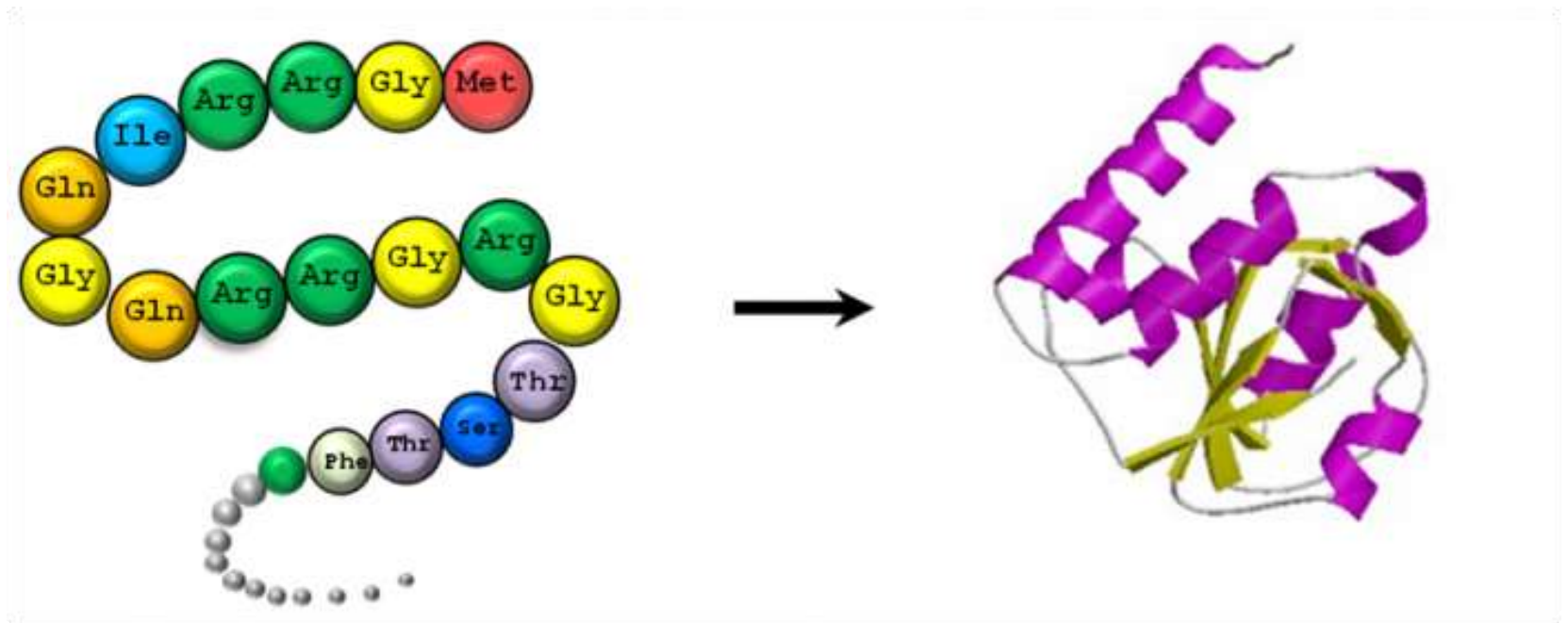


L-tyrosine (Tyr, Y)

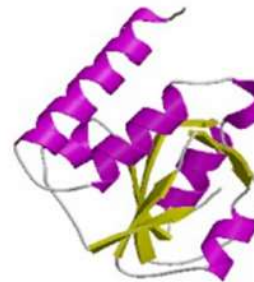
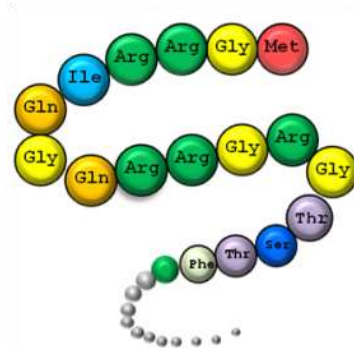
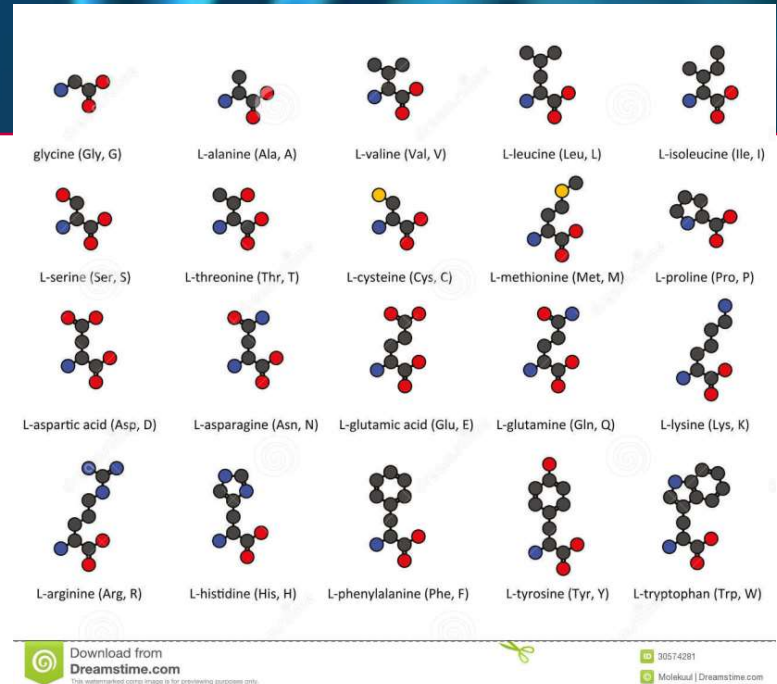
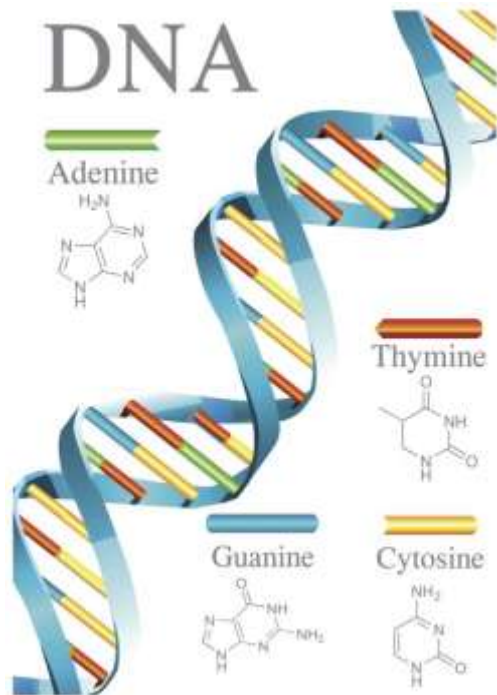


L-tryptophan (Trp, W)

Eiwitten



Kortom



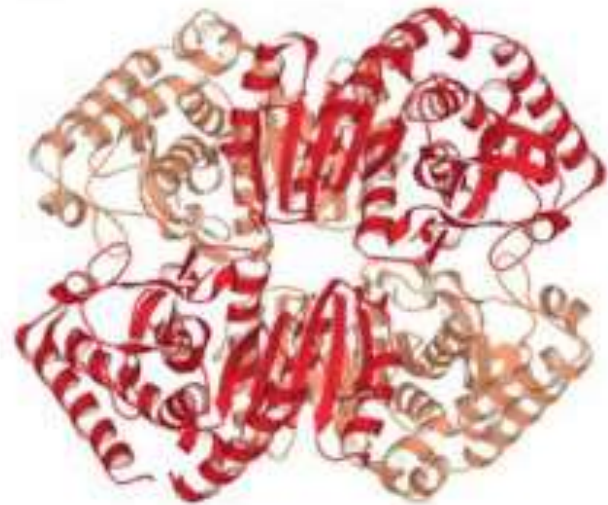
En nu, wat kunnen we hiermee?



- **Eiwit A**



Eiwit B



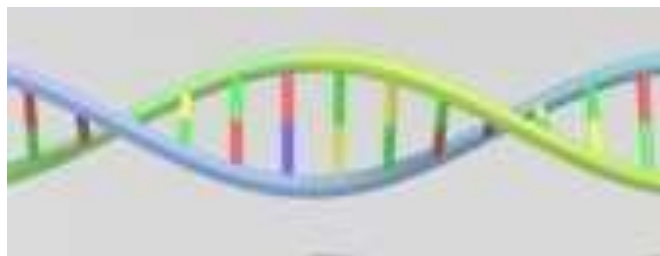
- **Eiwit A**



Eiwit B



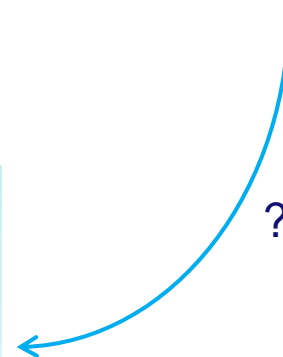


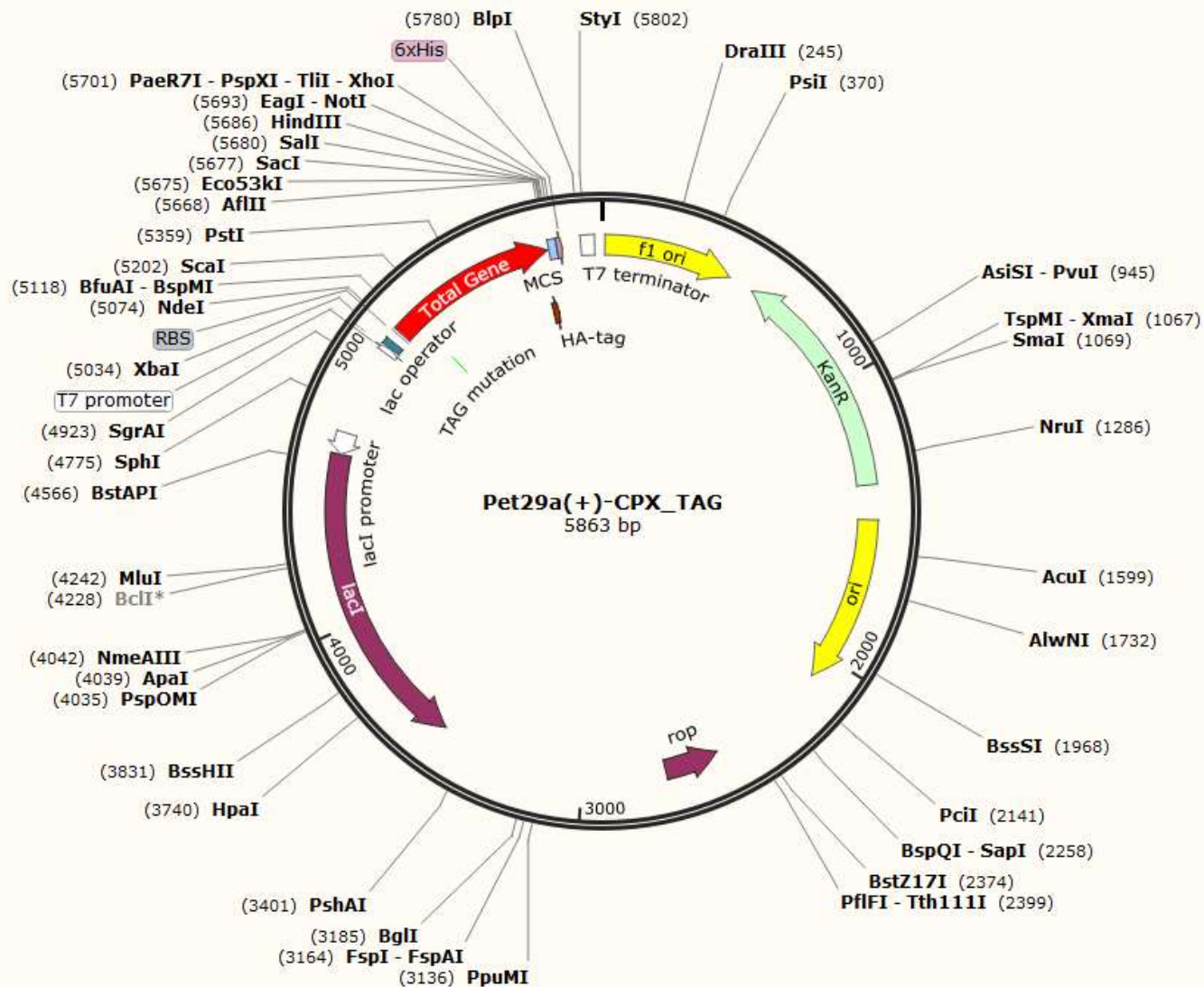


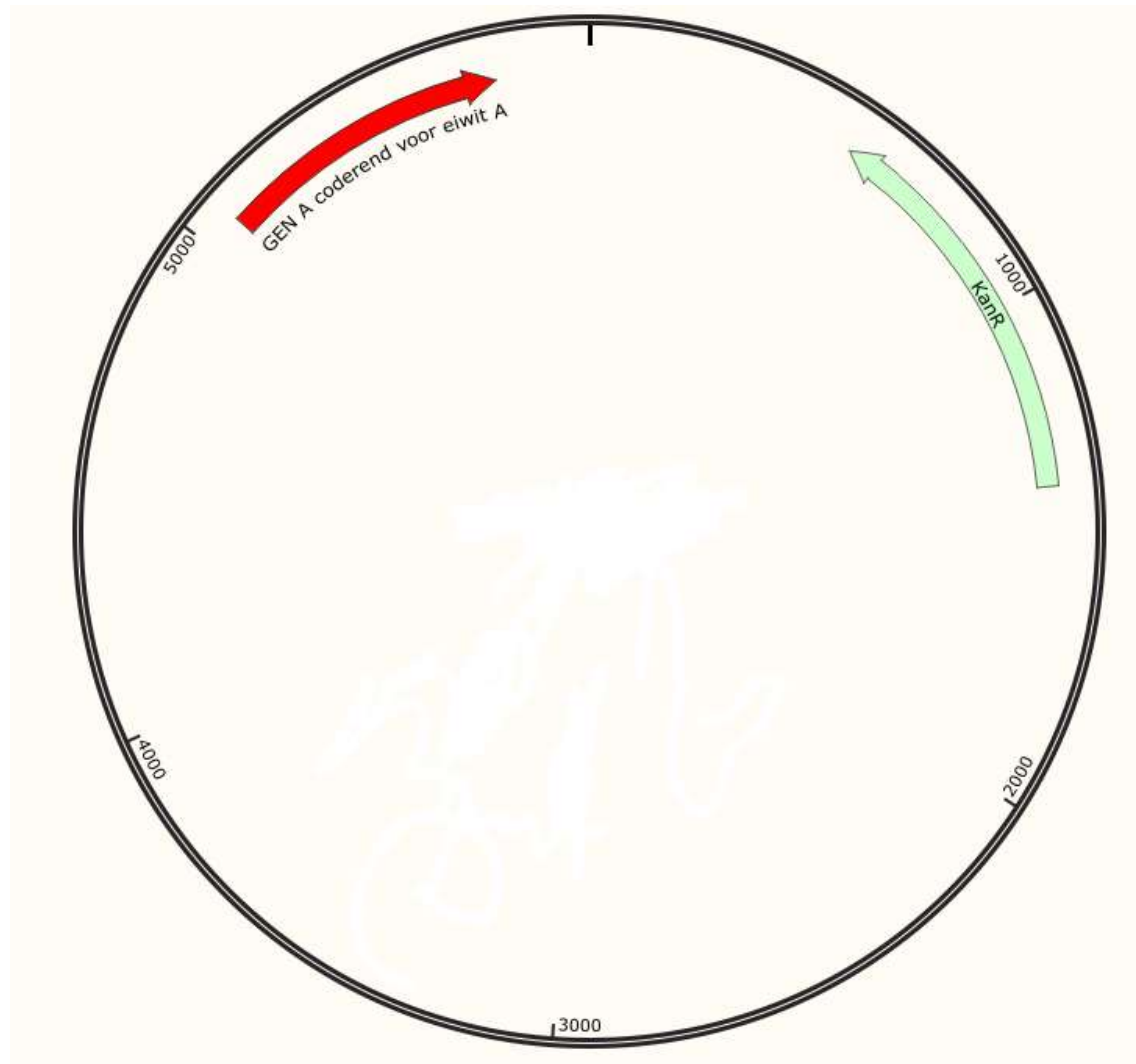
Gen A



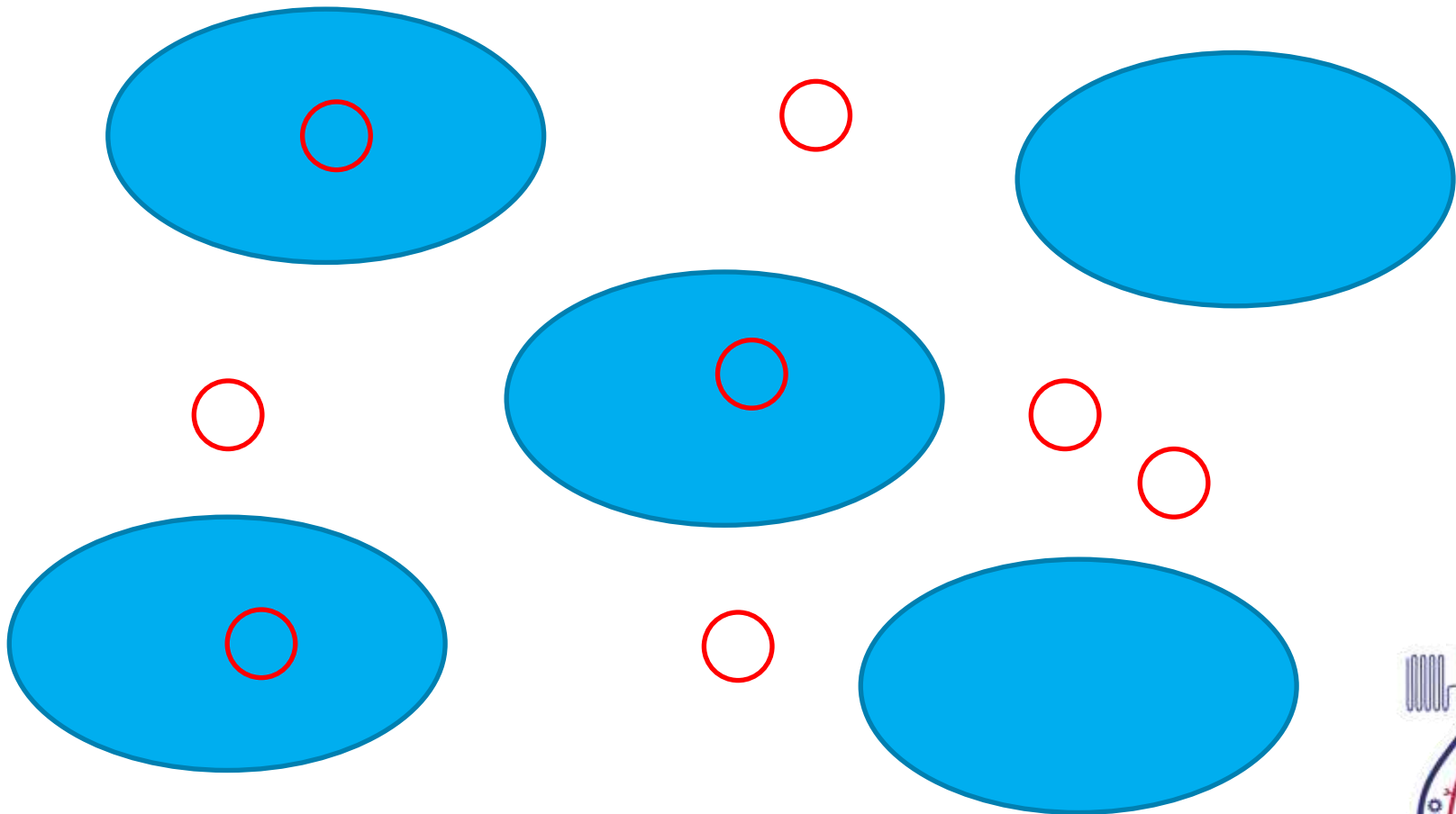
?



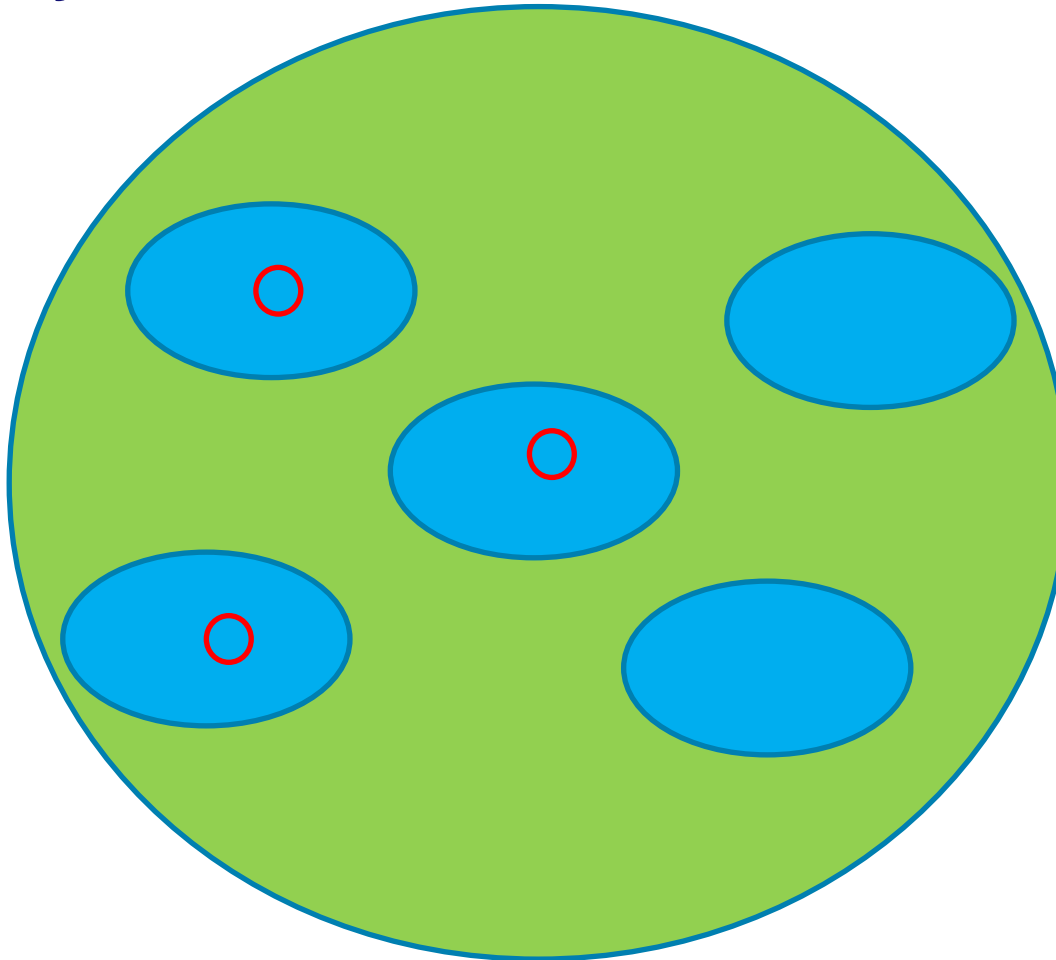




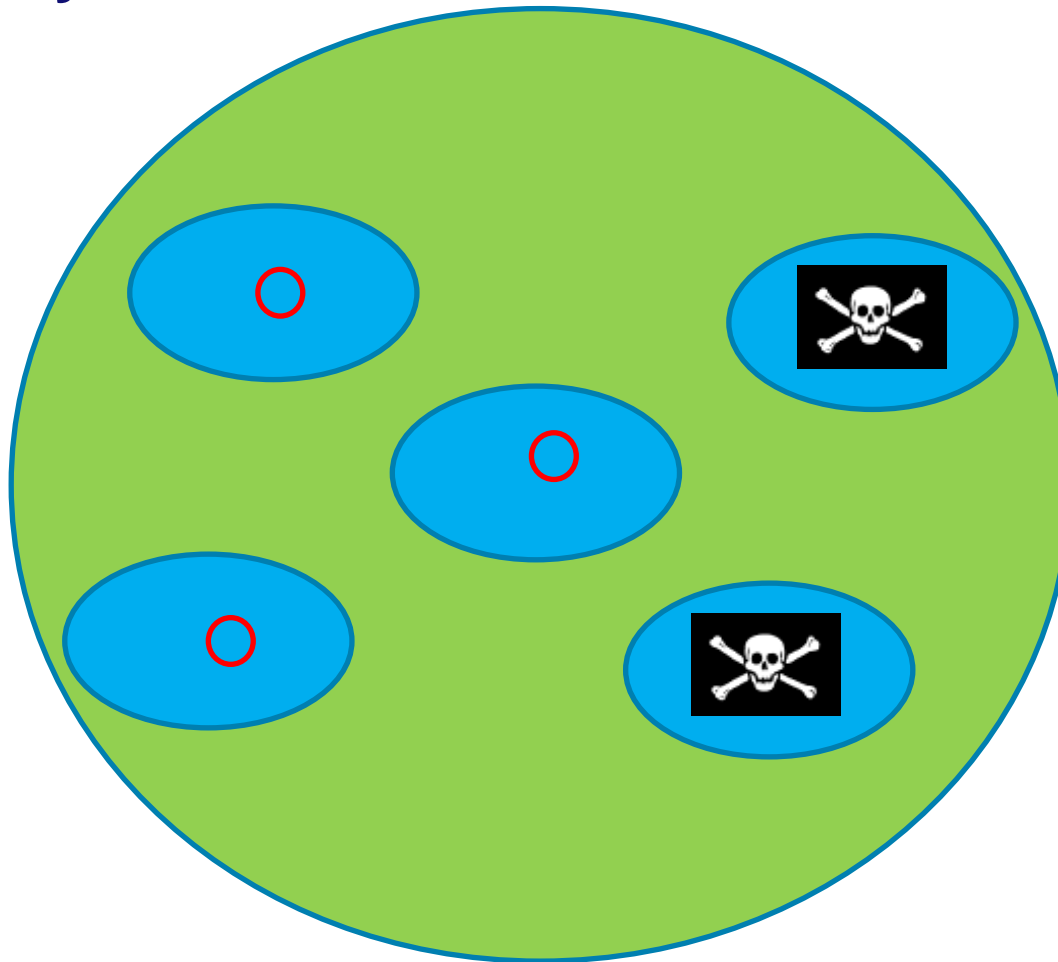
Selectie mechanisme?

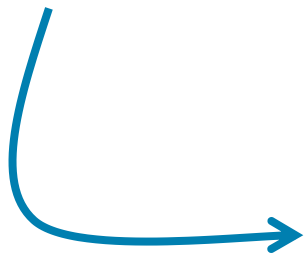
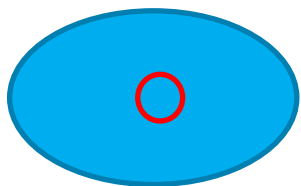


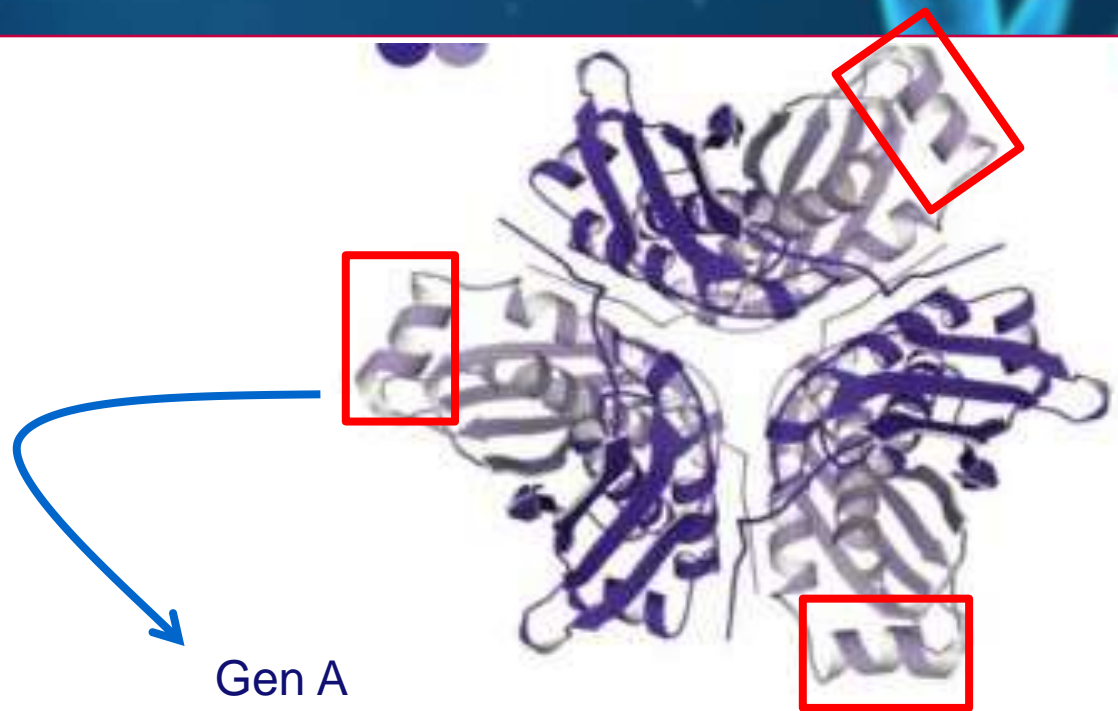
- **Kanamycine Plate**



- **Kanamycine Plate**





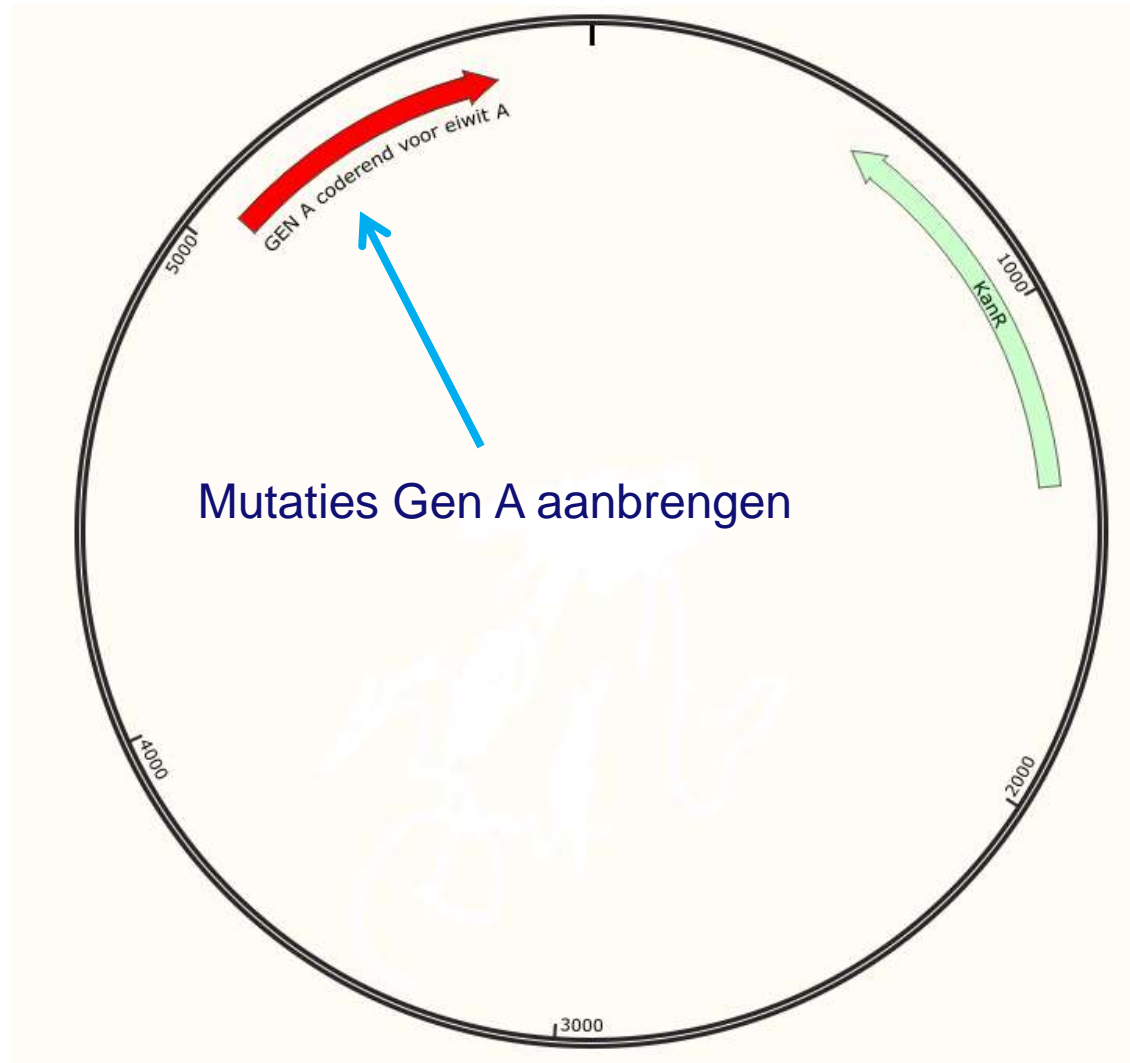


Gen A

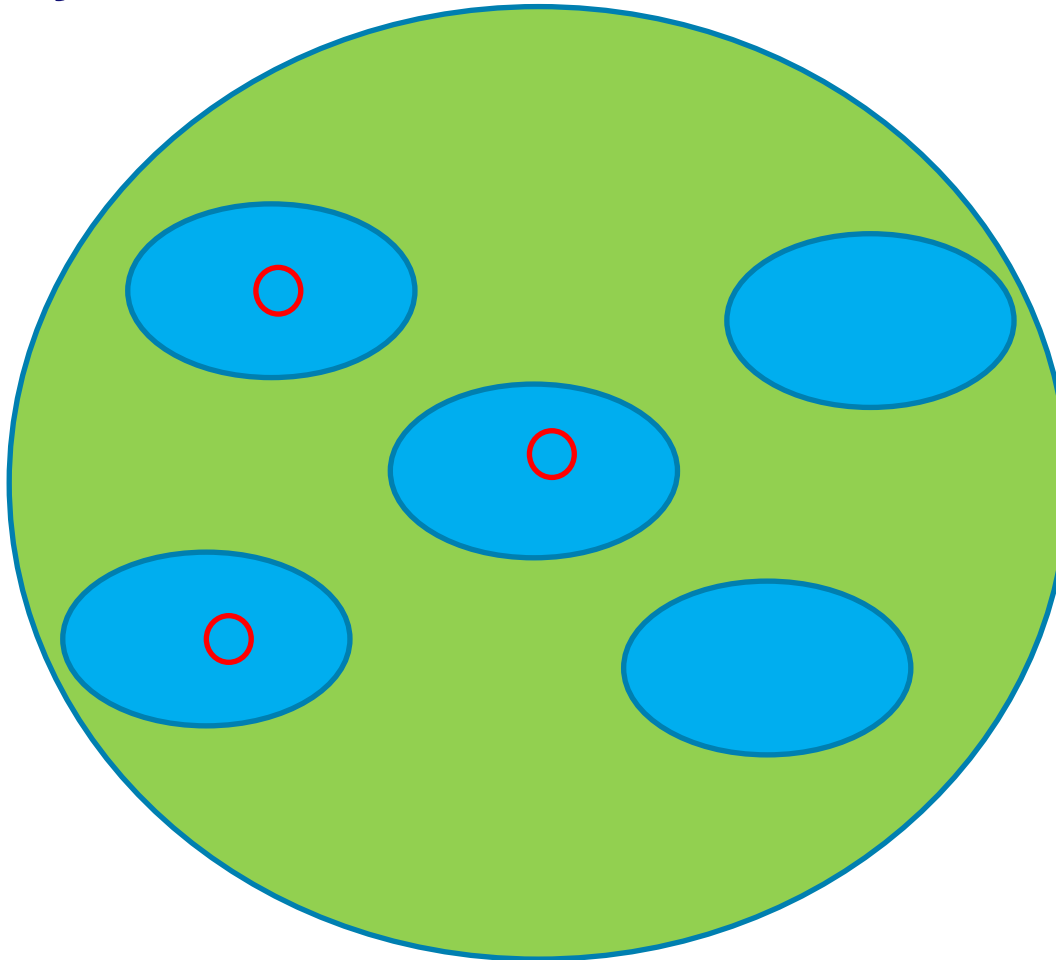


Gen A+

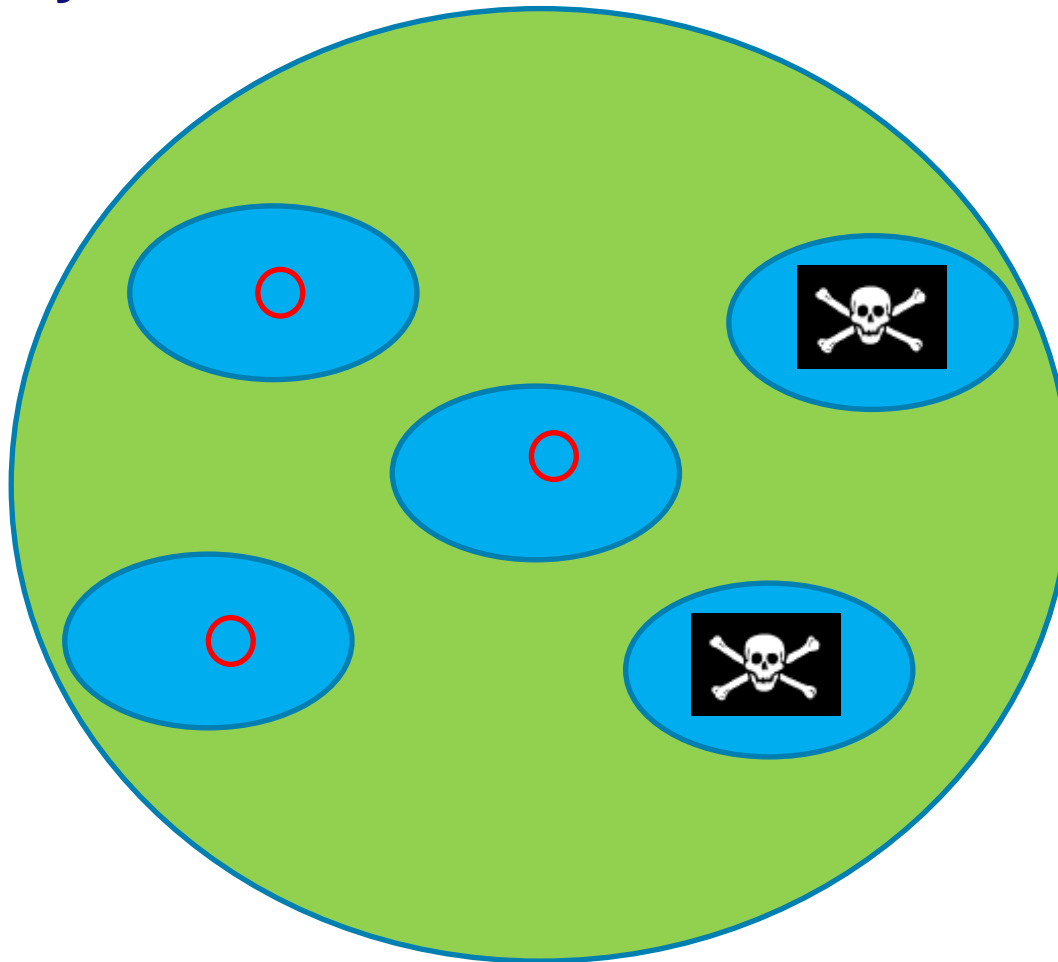


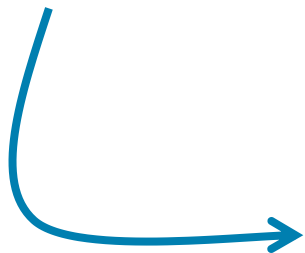
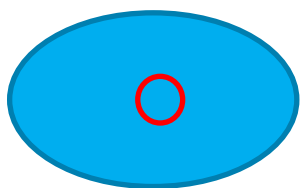


- **Kanamycine Plate**

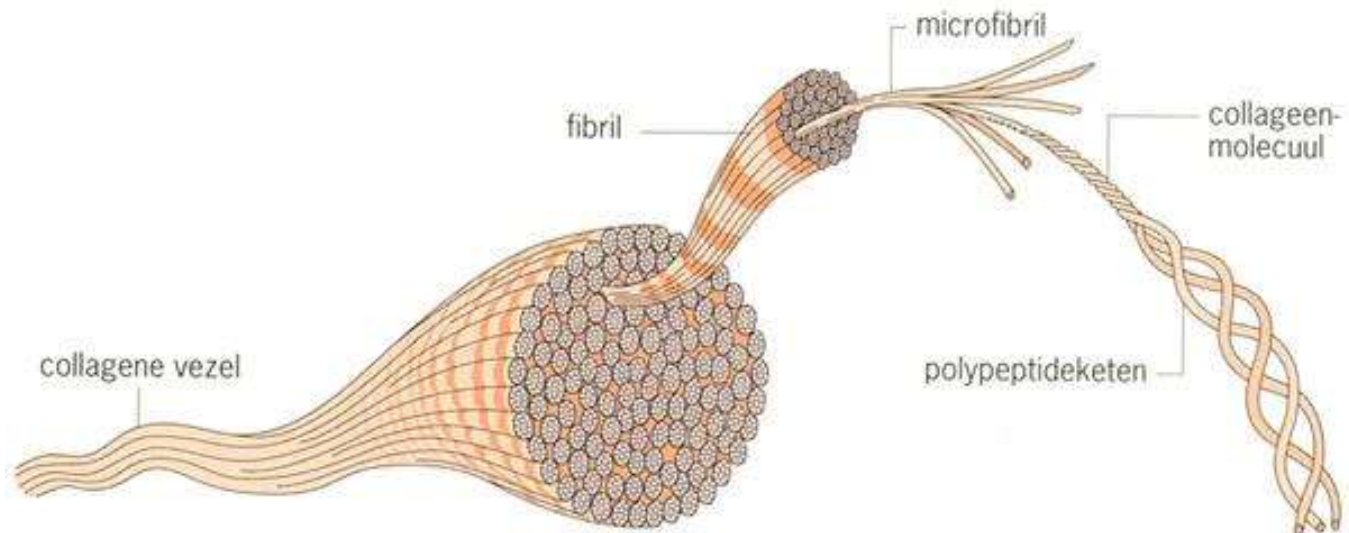
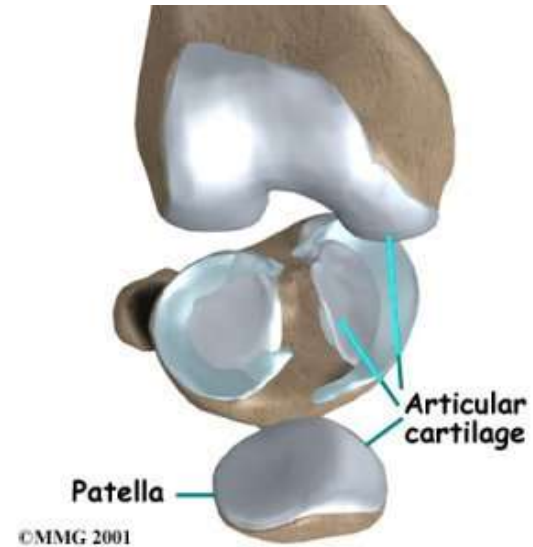


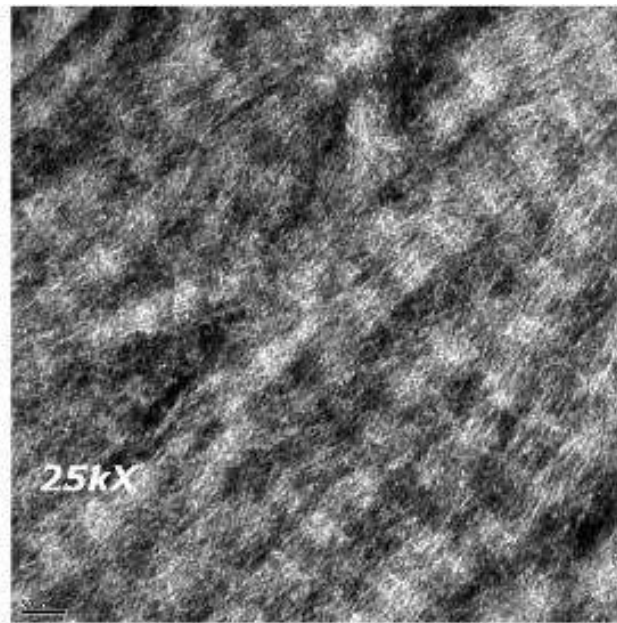
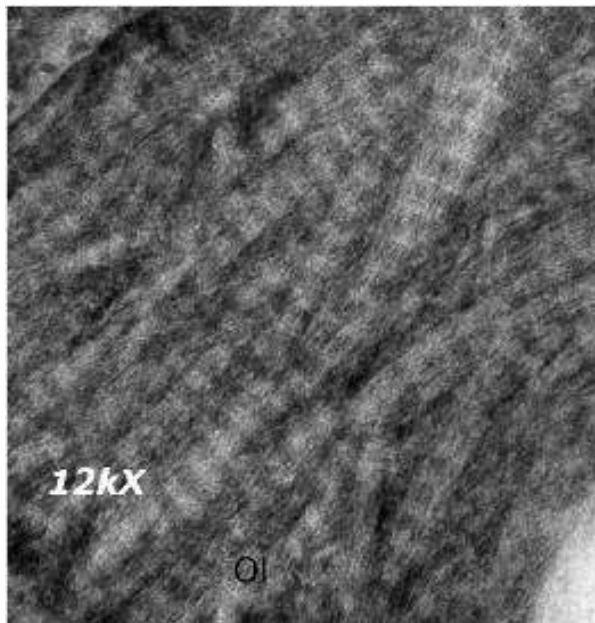
- **Kanamycine Plate**



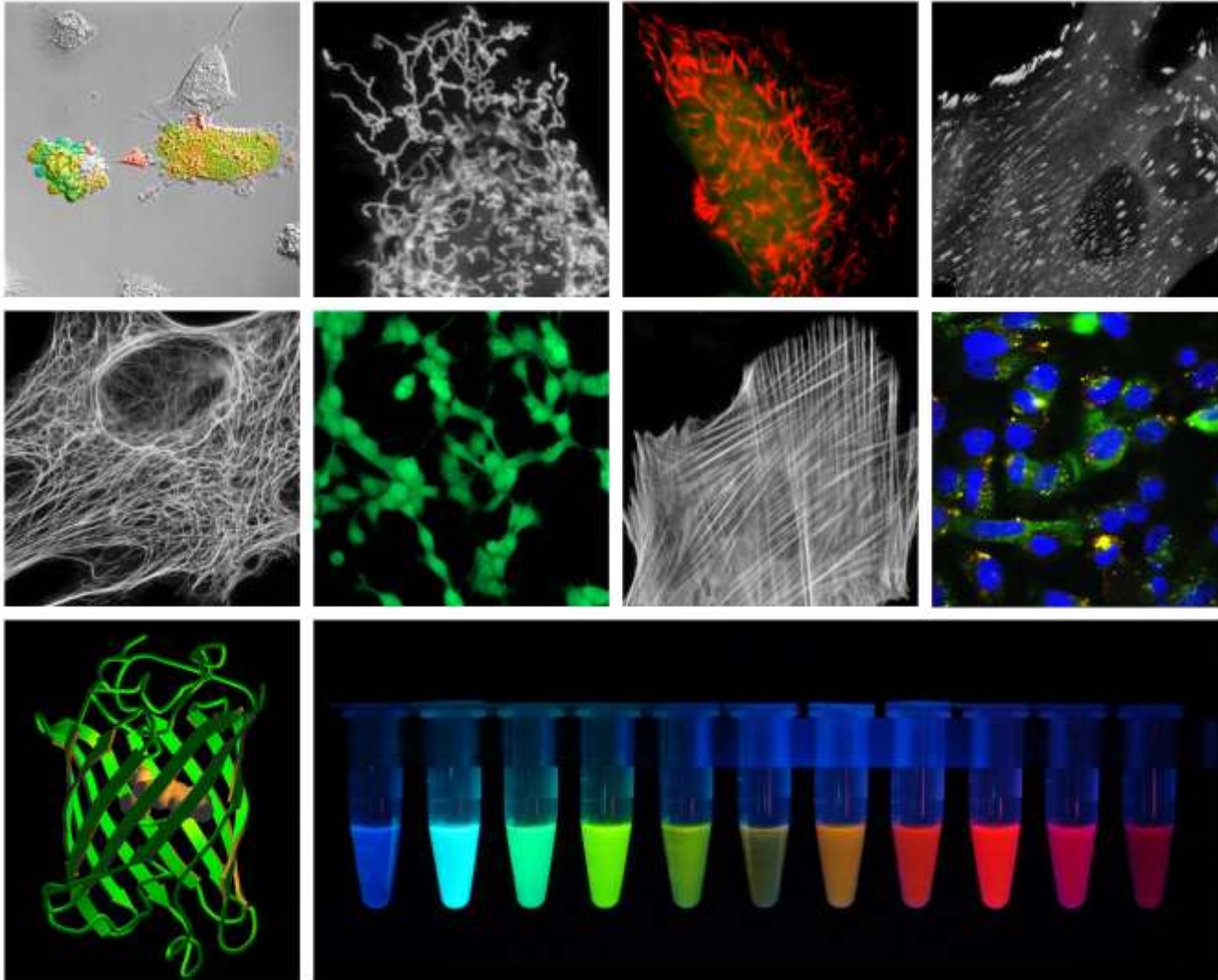


Tissue Engineering

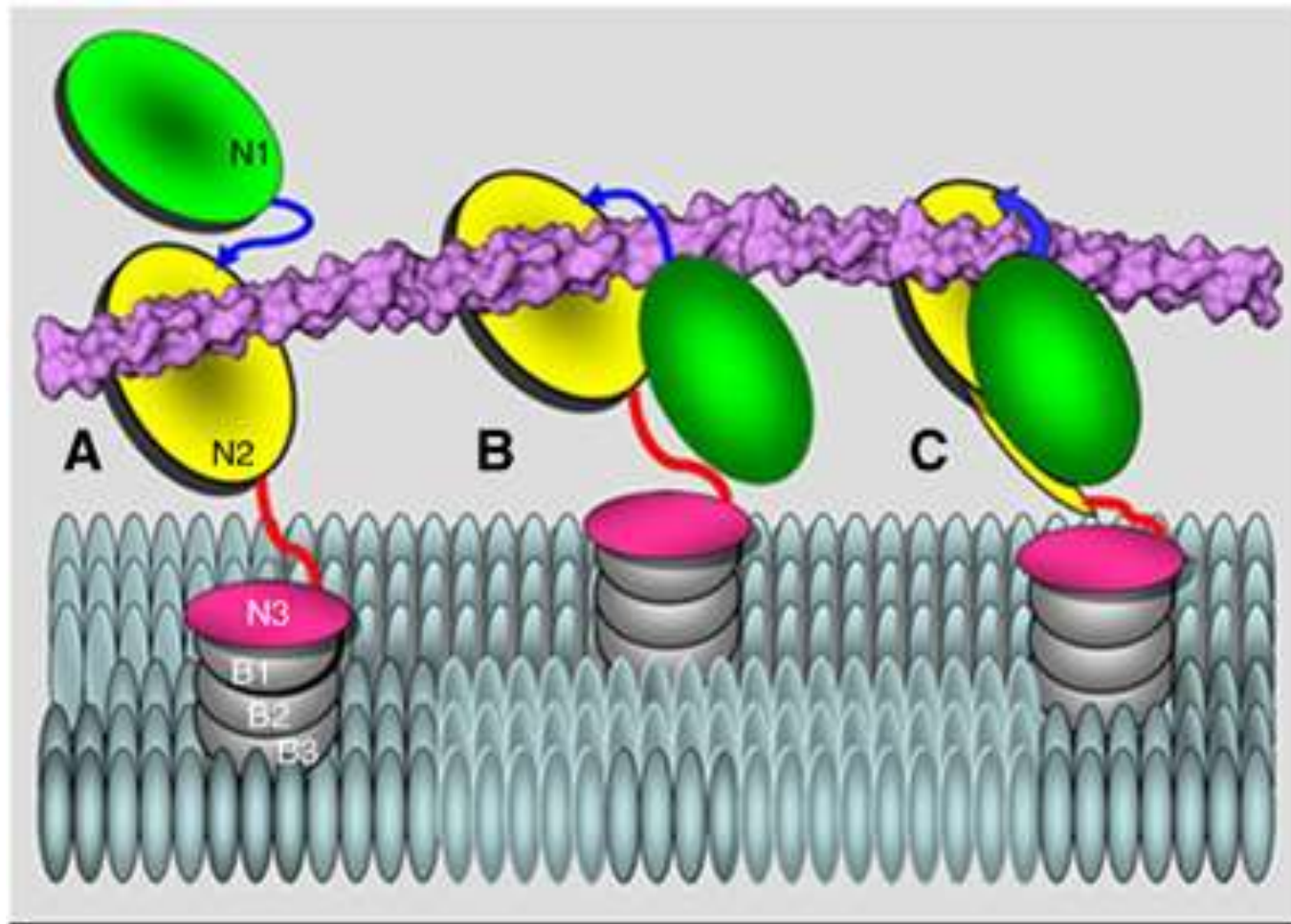


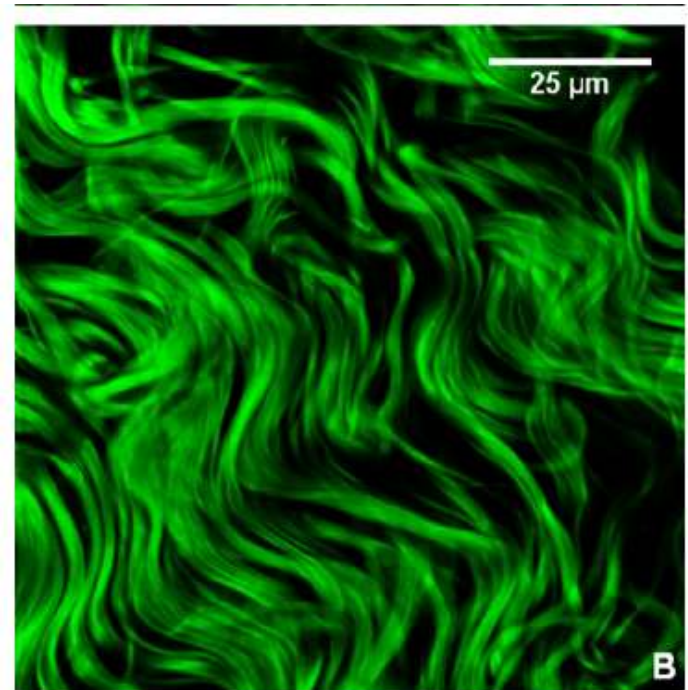
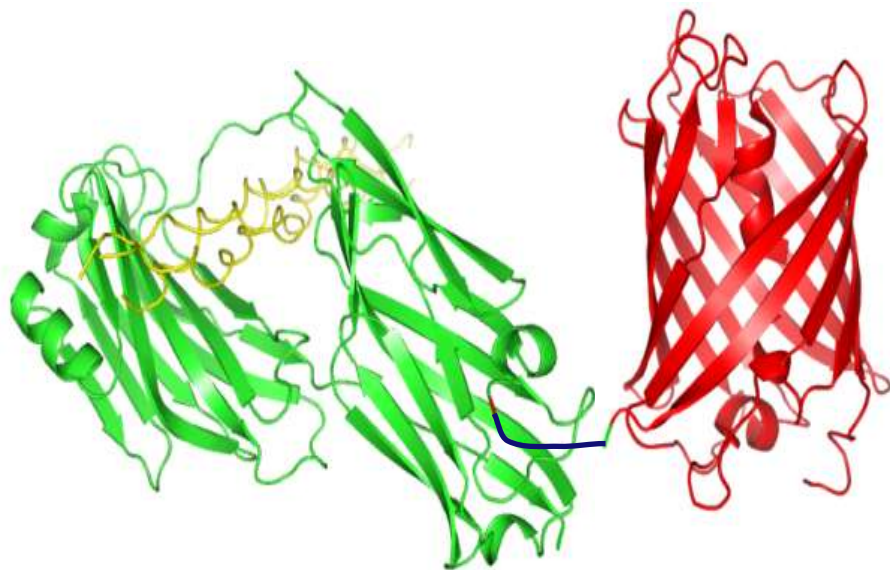


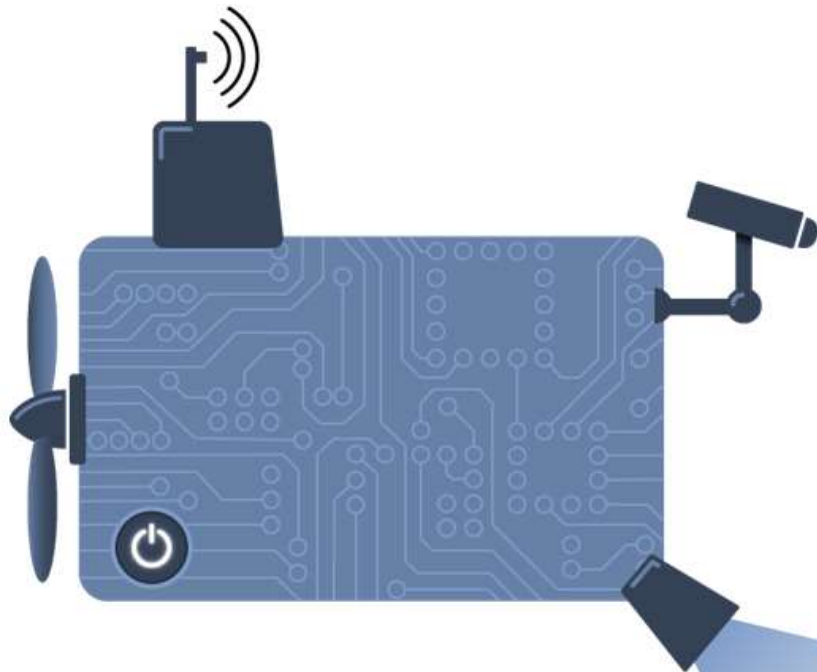
Fluorescent eiwit



Collageen bindend eiwit



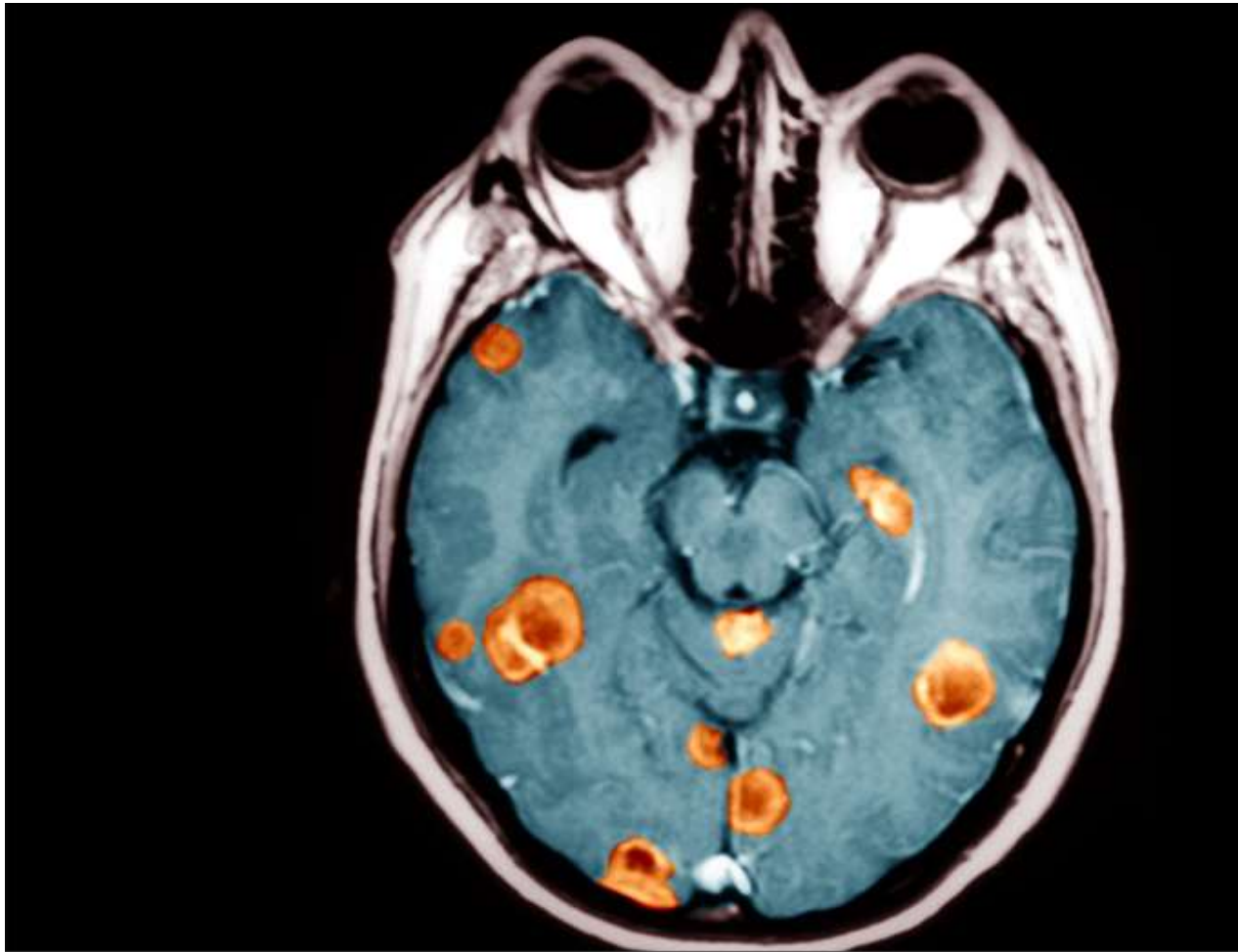




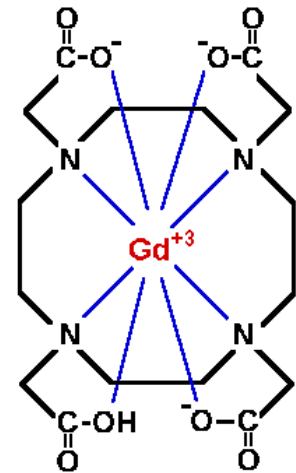
MRiGEM

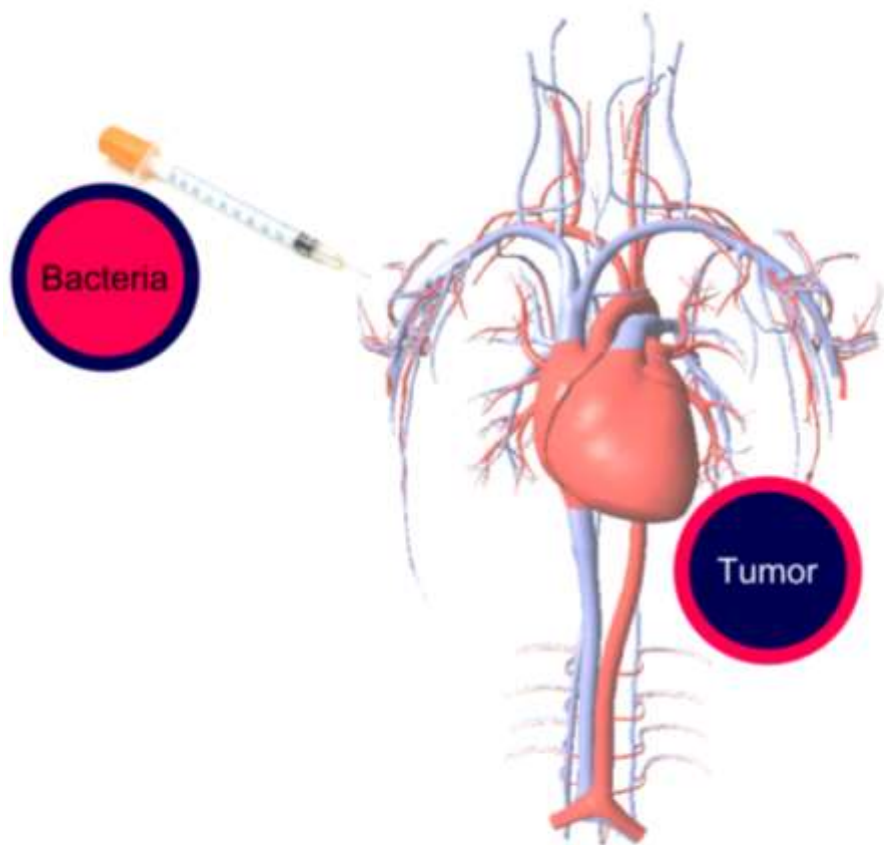
TEAM TU-EINDHOVEN

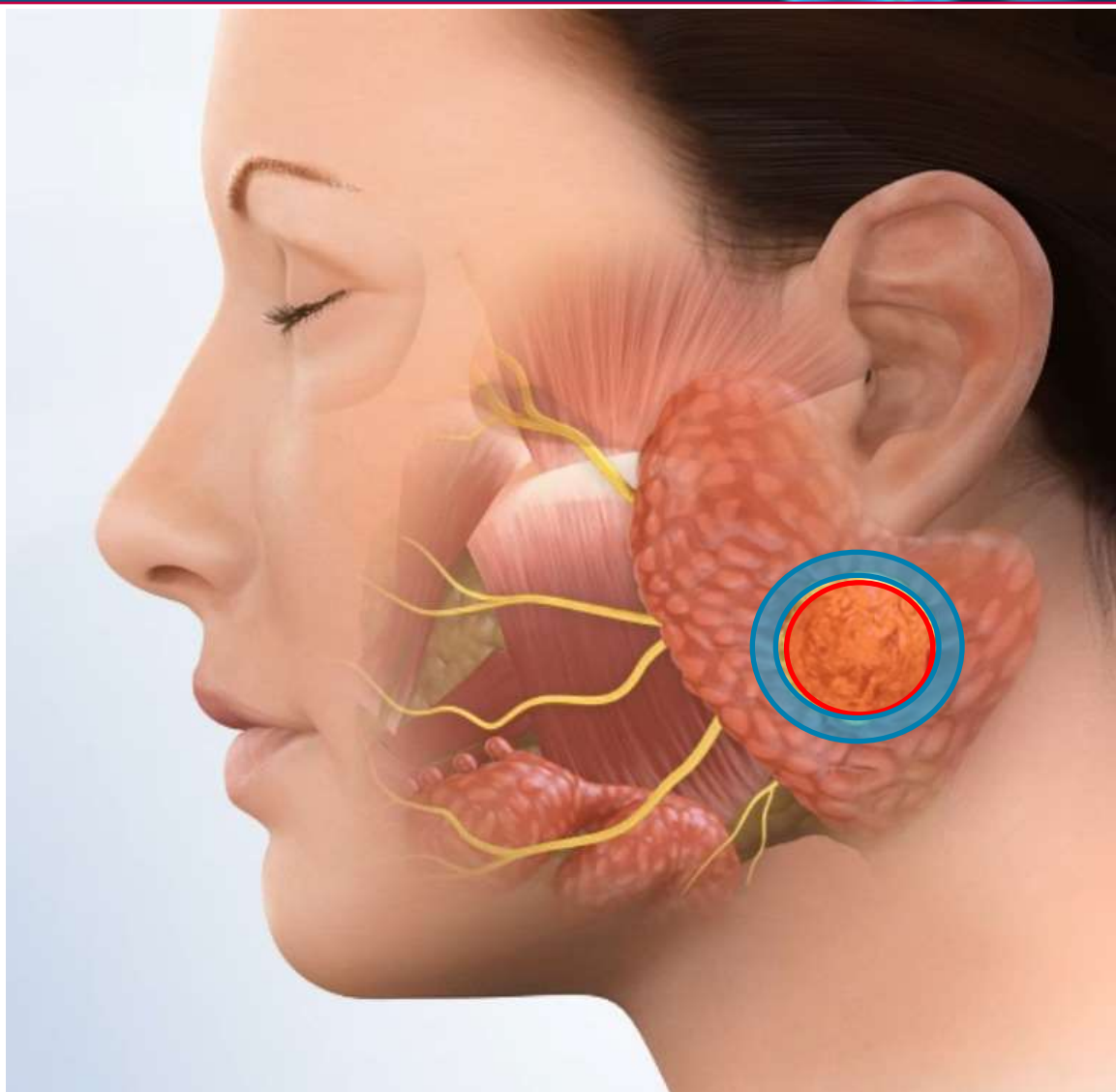




Gd-DOTA

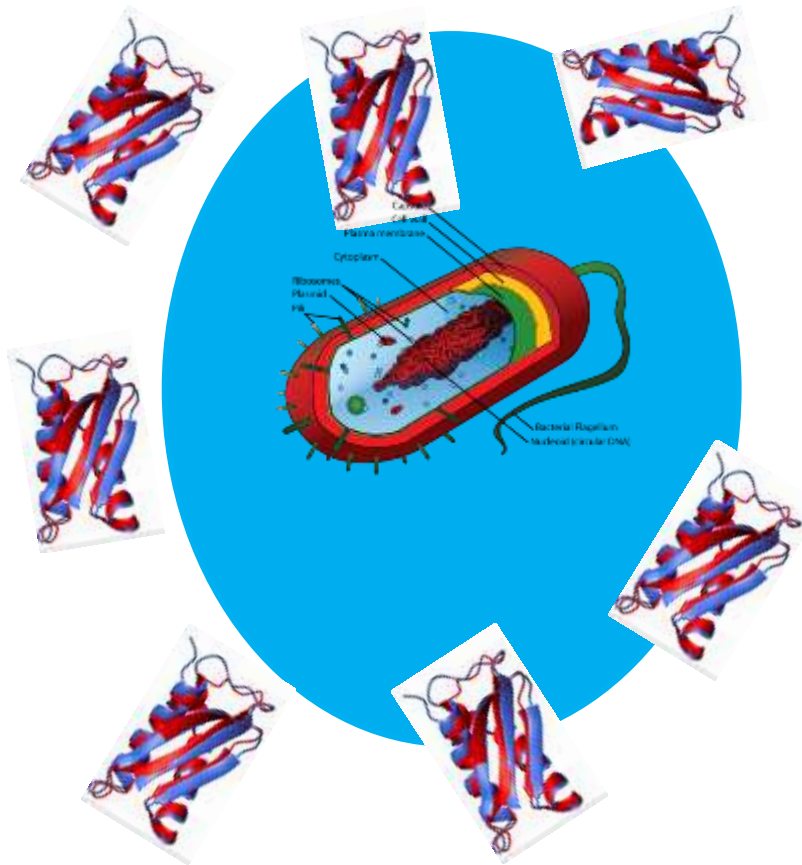




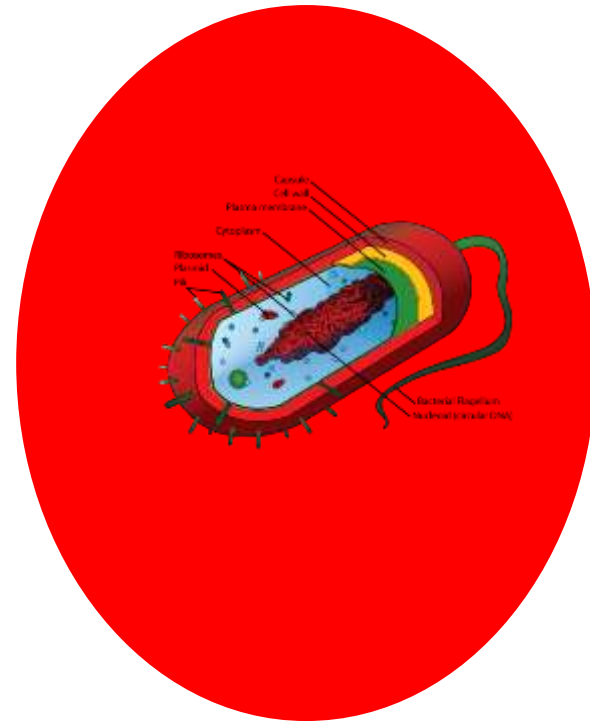


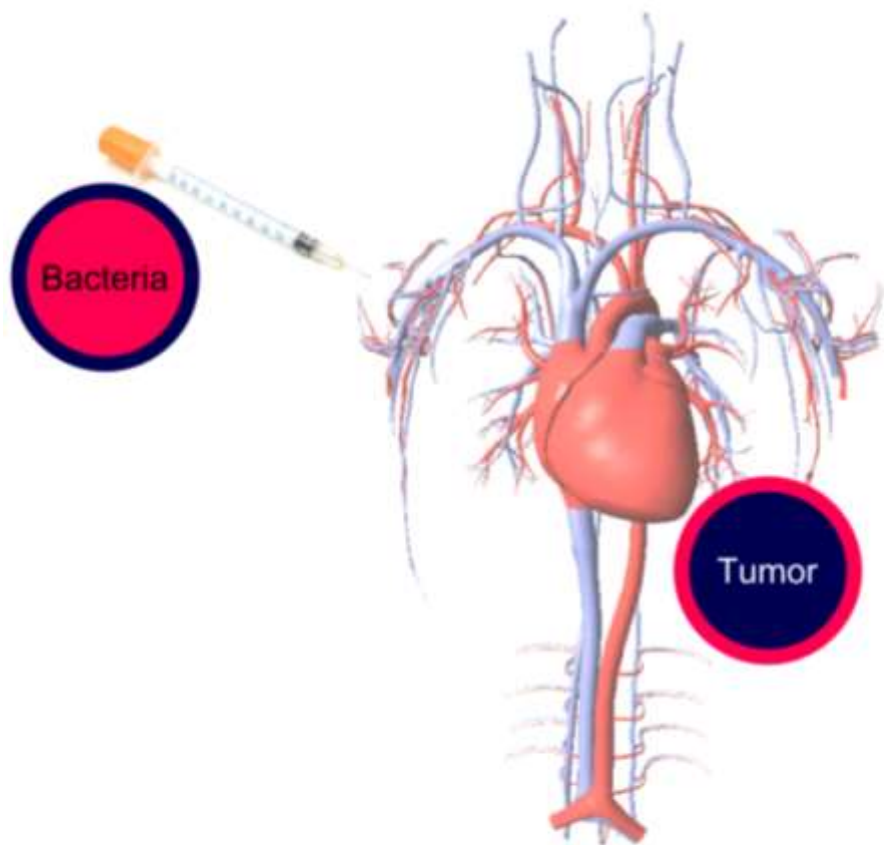
Mechanisme

Zuurstof-arm



Zuurstof-rijk





'I can create Neanderthal baby, I just need willing woman'

A scientist has said it would be possible to clone a Neanderthal baby from ancient DNA if he could find a woman willing to act as a surrogate.



“You don’t see anything sacrilegious about this?”

“I wouldn’t say sacrilegious,” Church responds. “Humans have been manipulating humans in many ways for many years.”

George Church, 2010



Bedankt voor uw aandacht

